We Claim:

1. A method of operating a machine processing printing material sheets and having a sheet transport drum operating in various operating modes, drum circumferential shells being held fixed on the sheet transport drum in an outer position in a first of the operating modes and in an inner position in a second of the operating modes, which comprises:

removing the drum circumferential shells from the sheet transport drum during a drum conversion to be carried out before the start of a third of the operating modes; and

rotating the sheet transport drum without the drum circumferential shells in the third operating mode.

2. The method according to claim 1, which further comprises:

providing the sheet transport drum with adjustable carriers; and

carrying the drum circumferential shells with adjustable carriers in the first and second operating modes.

3. The method according to claim 2, which further comprises providing the adjustable carriers of the sheet transport drum as swinging arms of coupler mechanisms.

- 4. The method according to claim 2, which further comprises, during a change in an operating mode carried out between the first and second operating modes, adjusting each of the drum circumferential shells, together with a respective one of the adjustable carriers, into one of the inner and outer positions.
- 5. The method according to claim 2, which further comprises, during the drum conversion, guiding the drum circumferential shells with the adjustable carriers by moving the drum circumferential shells along the adjustable carriers and guiding the drum circumferential shells with the adjustable carriers during the movement.
- 6. The method according to claim 2, which further comprises:

disposing guides separately from the adjustable carriers on the sheet transport drum; and

during the drum conversion, guiding the drum circumferential shells with the guides by moving the drum circumferential shells along the guides and guiding the drum circumferential shells with the guides.

- 7. The method according to claim 5, which further comprises respectively guiding the drum circumferential shells with the sheet transport drum not rotating.
- 8. The method according to claim 6, which further comprises respectively guiding the drum circumferential shells with the sheet transport drum not rotating.
- 9. The method according to claim 2, which further comprises, during the drum conversion, pushing the drum circumferential shells away from the sheet transport drum by rotational movements of the sheet transport drum.
- 10. The method according to claim 2, which further comprises:

holding the drum circumferential shells on the sheet transport drum in the first and second operating modes with holders; and

during the drum conversion, automatically releasing the holders by a respective relative movement carried out between the sheet transport drum and at least one machine element separate from the sheet transport drum.

11. The method according to claim 9, which further comprises:

holding the drum circumferential shells on the sheet transport drum in the first and second operating modes with holders; and

during the drum conversion, automatically releasing the holders by a respective relative movement carried out between the sheet transport drum and at least one machine element separate from the sheet transport drum.

- 12. The method according to claim 10, which further comprises utilizing a drum circumferential shell guide as one of the machine element and each of the machine elements.
- 13. The method according to claim 1, which further comprises, in the third operating mode, transporting the printing material sheets with the rotating sheet transport drum.
- 14. The method according to claim 1, which further comprises, in the third operating mode, rotating the sheet transport drum for maintenance.
- 15. A method of operating a machine processing printing material sheets, which comprises:

providing a sheet transport drum of the printing machine with drum circumferential shells;

operating the sheet transport drum in various operating modes;

in a first of the operating modes, fixing the drum circumferential shells in an outer position on the sheet transport drum;

in a second of the operating modes, fixing the drum circumferential shells in an inner position on the sheet transport drum;

before a start of a third of the operating modes, removing the drum circumferential shells from the sheet transport drum during a drum conversion; and

in the third operating mode, rotating the sheet transport drum without the drum circumferential shells.

16. The method according to claim 15, which further comprises:

providing the sheet transport drum with adjustable carriers; and

in the first and second operating modes, carrying the drum circumferential shells with adjustable carriers.

- 17. The method according to claim 16, which further comprises providing the adjustable carriers of the sheet transport drum as swinging arms of coupler mechanisms.
- 18. The method according to claim 16, which further comprises, during a change in an operating mode carried out between the first and second operating modes, adjusting each of the drum circumferential shells, together with a respective one of the adjustable carriers, into one of the inner and outer positions.
- 19. The method according to claim 16, which further comprises, during the drum conversion, guiding the drum circumferential shells with the adjustable carriers by moving the drum circumferential shells along the adjustable carriers and guiding the drum circumferential shells with the adjustable carriers during the movement.
- 20. The method according to claim 16, which further comprises:

disposing guides separately from the adjustable carriers on the sheet transport drum; and

during the drum conversion, guiding the drum circumferential shells with the guides by moving the drum circumferential

shells along the guides and guiding the drum circumferential shells with the guides.

- 21. The method according to claim 19, which further comprises respectively guiding the drum circumferential shells with the sheet transport drum not rotating.
- 22. The method according to claim 16, which further comprises, during the drum conversion, pushing the drum circumferential shells away from the sheet transport drum by rotational movements of the sheet transport drum.
- 23. The method according to claim 16, which further comprises:

in the first and second operating modes, holding the drum circumferential shells on the sheet transport drum with holders; and

during the drum conversion, automatically releasing the holders by a respective relative movement carried out between the sheet transport drum and at least one machine element separate from the sheet transport drum.

- 24. The method according to claim 23, which further comprises utilizing a drum circumferential shell guide as the machine element.
- 25. The method according to claim 15, which further comprises, in the third operating mode, transporting the printing material sheets with the rotating sheet transport drum.
- 26. The method according to claim 15, which further comprises, in the third operating mode, rotating the sheet transport drum for maintenance.
- 27. A method of operating a machine processing printing material sheets, which comprises:

operating a sheet transport drum of a printing machine in different modes to:

fix drum circumferential shells on the sheet transport drum in an outer position in a first of the operating modes;

fix the drum circumferential shells on the sheet transport drum in an inner position in a second of the operating modes; and

remove the drum circumferential shells from the sheet transport drum during a drum conversion to be carried out before the start of a third of the operating modes and to rotate the sheet transport drum without the drum circumferential shells in the third operating mode.